

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/533,983	09/29/2005	Bernard Pucci	033339/292036	9626
826 ALSTON & B	826 7590 09/17/2007 ALSTON & BIRD LLP		EXAMINER	
BANK OF AM	IERICA PLAZA		LAU, JONATHAN S	
	RYON STREET, SUITE 40 , NC 28280-4000	TE 4000	ART UNIT	PAPER NUMBER
	, 1.0 20200 .000		1609	· -·
			MAIL DATE	DELIVERY MODE
•			09/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)					
Office Action Commence	10/533,983	PUCCI ET AL.					
Office Action Summary	Examiner	Art Unit					
	Jonathan S. Lau	1609					
The MAILING DATE of this communication apperiod for Reply	pears on the cover sheet with the	correspondence address					
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING E.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period.  - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATIO .136(a). In no event, however, may a reply be tild will apply and will expire SIX (6) MONTHS from te, cause the application to become ABANDONE	N. mely filed the mailing date of this communication. ED (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on	•						
· ·	is action is non-final.						
3) Since this application is in condition for allowa	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.					
Disposition of Claims							
4)⊠ Claim(s) <u>1-30</u> is/are pending in the application	4)⊠ Claim(s) 1-30 is/are pending in the application.						
4a) Of the above claim(s) is/are withdra	4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.							
6) Claim(s) is/are rejected.							
7) Claim(s) is/are objected to.							
8) Claim(s) <u>1-30</u> are subject to restriction and/or	election requirement.						
Application Papers							
9) The specification is objected to by the Examin	er.						
10)☐ The drawing(s) filed on is/are: a)☐ acc		Examiner.					
Applicant may not request that any objection to the	e drawing(s) be held in abeyance. Se	e 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correct	ction is required if the drawing(s) is ob	jected to. See 37 CFR 1.121(d).					
11) The oath or declaration is objected to by the E	xaminer. Note the attached Office	Action or form PTO-152.					
Priority under 35 U.S.C. § 119							
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of:	n priority under 35 U.S.C. § 119(a	)-(d) or (f).					
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the price	• •						
application from the International Burea	au (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list	t of the certified copies not receive	ed.					
Attachment(s)							
1) Notice of References Cited (PTO-892)	4) Interview Summary						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08)	Paper No(s)/Mail Date  5) Notice of Informal Patent Application						
Paper No(s)/Mail Date	6) Other:						

Art Unit: 1609

### **DETAILED ACTION**

### Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-27, drawn to a compound comprising a fluorocarbon chain and an amino acid chain, and pharmaceutical compositions thereof.

Group II, claim(s) 28, drawn to a method of preventing and/or treating cancer using the compound of formula A, C, D, or F disclosed in the instant application. (see Examiner's Note below)

Group III, claim(s) 29, drawn to a method of detecting the presence of cancerous cells using the compound of formula B disclosed in the instant application. (see Examiner's Note below)

Group IV, claim(s) 30, drawn to a method of preventing and/or treating pathologies associated with oxidative stress using the compound of formula E disclosed in the instant application. (see Examiner's Note below)

Art Unit: 1609

**Examiner's Note**: Examiner is interpreting the non-statutory use claims as a method of using the compounds to treat or detect diseases. If Examiner has misinterpreted the claims and Applicant's claims were intended to be drawn to a method of making a pharmaceutical composition of compound and not to a method of treating or detecting disease using the pharmaceutical composition then these claims should be grouped with the invention of Group I and only the following species election is required.

The inventions listed as Groups I, II, III, and IV do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The common feature of the inventions is the fragment with a core structure comprising a fluorocarbon chain and an amino acid chain. Such a fragment of a compound is a known product, for example compound 28a or 28b disclosed in scheme 4, shown here:

Art Unit: 1609

Scheme 4

See Wang and Xu, page 12600 (Wang and Xu, Tetrahedron, 1998, 54, p12597-12608, cited in PTO-892). An active principle can be considered to be a proton on the glutamine side chain, which is "capable of acting on a biological target" by proton transfer or by acting by non-bonding interactions such as van der Waals forces. Therefore the special technical feature of each group is the specific compound, not the generic core structure.

## Species Election Requirement

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

**Art Unit: 1609** 

The species are the specific compounds described by the generic structure of a compound comprising a fluorocarbon chain and an amino acid chain, for example:

the compound of formula A, disclosed in claim 16, the compound of formula B, disclosed in claim 21, the compound of formula C, disclosed in claim 24, the compound of formula D, disclosed in claim 24, the compound of formula E, disclosed in claim 18, or the compound of formula F, disclosed in claim 24.

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The claims are deemed to correspond to the species listed above in the following manner: Claims 1-15, 17, 19-20, and 22-28 are generic.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or

**Art Unit: 1609** 

corresponding special technical features for the following reasons: The common feature of the inventions is the fragment with a core structure comprising a fluorocarbon chain and an amino acid chain. Such a fragment is a known product, for example compound 28a or 28b disclosed in scheme 4, shown here:

Scheme 4

See Wang and Xu, page 12600 (Wang and Xu, Tetrahedron, 1998, 54, p12597-12608, cited in PTO-892). An active principle can be considered to be a proton on the glutamine side chain, which is "capable of acting on a biological target" by proton transfer or by acting by non-bonding interactions such as van der Waals forces. Therefore the special technical feature of each species is the specific compound, not the generic core structure.

Art Unit: 1609

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

## (see Examiner's Note above regarding interpretation of claims 28-30)

The examiner has required restriction between product and process claims.

Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder.

All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

Art Unit: 1609

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. Failure to do so may result in a loss of the right to rejoinder. Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Art Unit: 1609.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan S. Lau whose telephone number is 571-270-3531. The examiner can normally be reached on Monday - Thursday, 9 am - 4 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisors, Ardin Marschel can be reached on 571-272-0718 or Cecilia Tsang can be reached on (571)272-0562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ceclia J. Teang

Secritary Putent Examinar

Calogy Canter 1933